

**Late Excavations at Pompeii.**—The locality chosen for the late excavations made in honour of the Prince of Furstenberg was that adjoining the large house which had been opened at the meeting of the late Scientific Congress in Naples. After the stratum of *Lapilli*, about two feet high, had been removed, a number of door hinges, locks, nails, screws, and the like were found, all covered with a thick brown crust of oxide of iron. Amongst the many other objects, a door-knocker, with the under-plate appertaining to it, both of fine workmanship—the mountings of several garden implements, the bronze ornaments of chairs, armchairs, *Lectisternia*, hoops, and postaments of flower-pots—a cylindrical waterpail of lead, 4 feet high and 1½ feet diameter, with tasteful garlands and ornaments in embossed work, were brought to light. The terra-cottas which had once adorned the roof of this mansion were numerous; spoons which sent forth the water in the shape of lions' heads, &c. In one room were found fourteen slabs of different kinds of marble, and they were placed on the wall, just as they had been sawed asunder, eighteen hundred years ago! They were 8 feet by 4, and consisted of Phrygian and Bythinian marble, African *breccia*, verde antico, and a very rare sort of serpentine. The excavation was ably directed by Mr. Carlo Bonucci; and to complete the success of this operation, some beautiful and very interesting wall-pictures (*frescoes*) were found, whose description will be shortly given by Mr. B.

**Dome of Cologne.**—The completion of this vast ancient structure is the *punctum saliens*, around which all architectural endeavours of Germany are at present oscillating. A very important question was mooted, of late, at Cologne—viz., whether the meetings of the directing committee should be public. It seems that the activity of that body has been somewhat cramped, which was thought to be remedied if their resolutions were tested and supported by the public voice. Other considerations, however, seemed to prevail, and the publicity above alluded to was negatived by 1,900 against 500 votes. The construction goes on, notwithstanding prosperously, and the entrances of the south and north portal are already arched over, and both will probably, by next autumn, be raised up to the first gallery, and then the lateral naves of the side wings will also be arched over. The construction of the portals has given rise to a curious controversy, as it was asserted on several sides, that a gothic, found on the north side of the dome, exhibited the plan intended by the original builder; and that the commenced construction of the south portal was not in accordance with that style, and therefore with the original plan. Much pains had been taken to convert that assertion, oppositional to the intentions of the dome building committee. The truth of it is, however, best confirmed by the now progressing construction of the north portal, which is done in accordance with the clearly proved original plan.

**Imperial Academy of Sciences of Vienna.**—It seems that this tardy concession to the demands of the Austrian savans, will be of a very narrow and restricted character, comprehending merely natural history and philology. The sciences *moralis et politiquæ*, which, implying the whole system of social improvements of the age, and on the culture of which the Institute of France and Belgium lay such great stress, will be altogether avoided. The donation also of 17,000*l.* per annum, seems to us very inadequate, as half of the members, besides the president, are to be salaried. The Institute of France receives at least double that sum from Government, besides large bequests, &c.

**The Iron Foundries of Sweden.**—The taking off of the restrictions with which hitherto national industry has been shackled in most countries, is to be also applied to the above important branch. Up to the present time, only those forges in Sweden were permitted to make wrought iron which produced a certain annual amount of cast-iron. This restriction is now to be taken off, which will especially benefit the smaller sort of producers.

**Large Tunnel in the Styrian Mountains of the Vienna Trieste Line.**—Austrian journals call the tunnel of the Leitersberg a giant's work of subterranean architecture. The way from Graz to Marburg is said to abound in

objects of well-executed workmanship, amongst which the above excavation of 353 klaster (*cubits*) is the most important. The tunnel is 25 feet broad by 24 feet in height, and is thoroughly vaulted in. This tunnel was excavated by miners, and the *débris* of the mountain, which was not solid rock, but brittle sandstone, carried out by several pits sunk to the depth of the tunnel. The construction was the more difficult, as the plane of the rails lies 25 klaster under the surface of the surrounding terrain, and the pressure of the superjacent strata of soil, exercised, especially in the wet season, an uncommon pressure on the vaults in construction. Still, as it is, it is the greatest structural work of the kind in the Austrian realm.

**Progress of Stereochromy.**—This new process of mural (*fresco*) painting, has received a great impulse, by its being, of late, adopted by Kaulbach, who, after a few trials, has so far identified himself with this new method, that he manages it with the same ease as oil or fresco colours. Mr. K. has exhibited several stereochromic pictures in his atelier, which have been generally approved of. It has assumed under his hands a lustre and warmth of colour, as well as a pliability of execution, which surpasses every expectation, and he will now execute a large stereochromic fresco picture, for which he has completed the cartoon.

#### RAILWAY JOTTINGS.

A RAILWAY BOARD has been recommended in a recent report of the Select Committee on Railway Acts, as a distinct department of the executive Government, with engineers and other officers of its own, and "possessing all the powers, and executing all the duties now possessed and exercised by the Board of Trade, and such additional powers as may be necessary" in the "supervision of all railways and canals in any way connected with railways."

From tabular details (exclusive of additional and still more recent and considerable items), it appears that the royal assent has been given during the present session of Parliament, to Acts authorizing the construction of no less than 3,673 miles of railway, with a capital of 90,540,338*l.*, besides power to borrow 34,683,829*l.* more, making the total amount to be raised (how, it is not for us to guess) little less than 130,000,000*l.* sterling, a sum equal to a very considerable proportion of the whole of that enormous incubus which we already labour under, and cannot raise, viz., the national debt itself.—The Earl of Clarendon has declared his intention of providing a remedy against the practice of opening parcels on railways, claimed by certain companies, as recently complained of.—The wholesale advantages derivable from railway conveyance were somewhat strikingly evidenced on a recent occasion, when a large body of poor Irish labourers engaged a number of trucks for their own accommodation (at the usual charges, we presume), and in which they were conveyed from Liverpool to Rugby, via Birmingham, at a cost of four shillings per man, for a distance of 123 miles, or at the rate of one farthing and a half per mile for each. There were five trucks, each accommodating fifty-seven men.—The South Western Railway Company, it is said, have contributed 100*l.* to the fund for defraying the local expenses connected with the approaching congress of the British Association at Southampton.—The *Railway Times* gives the following account of the improvements, extensions, and other works originating in the recent fusion of the London and Birmingham, the Grand Junction, and the Liverpool and Manchester Railway Companies into one grand undertaking, named, the London and North-Western. "At Euston-square and Camden Town whole streets are to be demolished in order to extend the means of public accommodation. At Wolverton, a little colony of men is busily at work building new and extensive houses for the reception of the immense number of locomotives belonging to the company. At the smaller stations between London and Birmingham, the welcome hand of improvement is every where to be seen. In Birmingham alterations and improvements are about to be commenced which will be worthy of the importance of the place as the central

locomotive station of the country. Further on at Crewe, vast extensions are being made, and noble buildings being erected to accommodate the traffic which, in an unbroken stream, flows to that great 'railway fork'—three pronged at present, but which, ere long, will have three or four additional teeth. At the great terminals in Liverpool the alterations are being conducted on the most magnificent scale. The great tunnel, which from Liverpool is the outlet to all the world, is being ripped up for a portion of its length, in order to admit of new stations, extensive sheds, and commodious offices of all descriptions. The alterations in Liverpool are upon the most tremendous scale. They include a tunnel right under the town—a tunnel of some miles in length. Altogether, the steps which are being taken for the accommodation of the public are most extensive, and must, ultimately, be highly beneficial."—Contracts have been taken for 2,000 tons of plates of the best description, for the construction of the iron tunnel by which it is proposed to pass the Mersey Straits for the passage of railway trains. Of these 2,000 tons, 2,000 have been taken by Mr. Walter Williams, 1,500 by Messrs. Bramah, Barrows, and Hall, 1,000 by Messrs. Thornycroft and Co., 1,500 by Messrs. James Foster and Co., 1,000 by the Coalbrookdale Company, and 1,000 by the Butterley Company.—An iron bridge, erected over a chasm in the line of the Waterford and Limerick Railway, broke completely down on Wednesday week, while fifty persons, one horse, and a cart were on it. Fortunately the only life lost was that of the horse. It is said that the bridge was but temporarily and hastily erected (chiefly by night) for the accommodation of passengers at the Limerick cattle show. The efficiency of the principle on which it has been constructed is said to have been already fully tested in America.—A great many masons hitherto employed on a railway line at Markinch, in Scotland, have struck for an advance of wages, from 23*s.* to 24*s.* a week, with no deductions for doctor's fees; and if not paid fortnightly, for 25*s.* a week with monthly payments.—In the United States of America, 10,500 miles of railway are now open to traffic.—From a long engineering report to the East-India Company, on the practicability of introducing railways into India, it appears that "the great extent of its vast plains, which may in some directions, be traversed for hundreds of miles without encountering any serious undulations, the small outlay required for Parliamentary or legislative purposes, the low value of land, cheapness of labour, and general facilities for procuring building materials, may all be quoted as reasons why the introduction of a system of railroads is applicable to India." And as to obstacles peculiar to the climate and circumstances of the country, such as periodical rains and inundations, violent winds, ravages of insects and vermin upon timber and earth-work, rapid growth of underwood on earth and brick-work, open state of the country, &c., these, it is thought, are by no means insurmountable. A comparatively short line is suggested to begin with, between Calcutta and Mirzapore; continued, perhaps, between Mirzapore and Delhi.—A new claimant for the original invention of the electric telegraph has appeared in the person of an aged gentleman, Mr. Samuel Porter, of Hill-house, Harrow-weald, who, in a communication to the *Times*, of date 13th inst., prompted by the very natural and justifiable desire to connect his own name with his own invention ere he die, declares that, twenty-one years since, he laid the project of the electric telegraph before the Lords Commissioners of the Admiralty; but that, for ten or twelve years thereafter, "it was regarded as the wild vision of a deluded fancy; and when its virtues began to be unfolded, its origin was attributed to persons merely engaged in constructing apparatus for the working of it."—The commercial advantages derivable from this noble invention were strikingly tested between Leeds and Birmingham on Monday last, at twelve noon, when the Leeds Commercial Banking Company suspended business. In a quarter of an hour the fact was proclaimed in Birmingham, through the Midland line of telegraph, and the intimation was immediately made to the various banks and public offices; and much confusion, and many lawsuits, in all probability, raged in the bud.